

City of Flagstaff Pedestrian Bicycle FUTS Master Plans



DRAFT Working Paper 5 Walking and biking survey results

February 2016



Prepared by
City of Flagstaff
Flagstaff Metropolitan Planning Organization
211 West Aspen Avenue
Flagstaff, Arizona 86001

928 213 2685
mince@flagstaffaz.gov
www.flagstaff.az.gov
www.flagstaffmpo.org

Contents

Introduction

1 The survey

1 Questions

2 Outreach

2 Response

2 Organization of this report

3 Demographics of survey respondents

3 Gender

Table 1 Gender of survey respondents

Figure 1 Gender of survey respondents

3 Race

Table 2 Race of survey respondents

Figure 2 Race of survey respondents

4 Age

Table 3 Survey respondents by age group

Figure 3 Survey respondents by age group

5 Walking and biking frequency

Table 4 Walking frequency for survey respondents

Table 5 Bicycling frequency for survey respondents

Figure 4 Walking and bicycling frequency for survey respondents

Summary of findings

6 Walking results

8 Bicycling results

Walking results

13 Locations where it is difficult or uncomfortable to walk

13 *All locations*

Table 6 Least comfortable/most difficult places to walk, by type of location

Table 7 Least comfortable/most difficult places to walk, all locations

Table 8 Factors that make walking difficult or uncomfortable

Table 8a Factors that make walking difficult or uncomfortable – details for sidewalks

Table 8b Factors that make walking difficult or uncomfortable – details for crossings

Table 8c Factors that make walking difficult or uncomfortable – details for traffic

Table 8d Factors that make walking difficult or uncomfortable – details for driver behavior

15 *Streets*

Table 9 Least comfortable/most difficult streets for walking

Table 10 Factors for streets that make walking difficult or uncomfortable

Table 10a Factors for streets that make walking difficult or uncomfortable – Milton Road

Table 10b Factors for streets that make walking difficult or uncomfortable – Fourth Street

Table 10c Factors for streets that make walking difficult or uncomfortable – Route 66

Table 11 Streets where no sidewalks is an issue

Table 12 Streets where too few or no crossings is an issue

Table 13 Streets where traffic is an issue

18 *Intersections*

Table 14 Least comfortable/most difficult intersections for walking

Table 15 Factors for intersections that make walking difficult or uncomfortable

Table 16 Intersections where “failure to yield” is in an issue

19 *Neighborhoods*

Table 17 Least comfortable/most difficult neighborhoods for walking

Table 18 Factors for neighborhoods that make walking difficult or uncomfortable

20 *FUTS trails*

Table 19 Least comfortable/most difficult FUTS trails for walking

Table 20 Factors for FUTS trails that make walking difficult or uncomfortable

20 Locations where it is good to walk

20 *All locations*

- Table 21 Good places to walk, by type of location
- Table 22 Good places to walk, all locations
- Table 23 Factors that make it good to walk
- Table 23a Factors that make it good to walk – details for aesthetics

22 *Neighborhoods*

- Table 24 Good neighborhoods for walking
- Table 25 Factors for neighborhoods that make it good to walk
- Table 25a Factors for neighborhoods that make it good to walk – Downtown
- Table 25b Factors for neighborhoods that make it good to walk – NAU campus

23 *FUTS trails*

- Table 26 Good FUTS trails for walking
- Table 27 Factors for FUTS trails that make it good to walk

24 *Parks*

- Table 28 Good parks for walking
- Table 29 Factors for parks that make it good to walk

25 *Streets*

- Table 30 Good streets for walking
- Table 31 Factors for streets that make it good to walk

26 **What's good about walking in Flagstaff**

- Table 32 What's good about walking in Flagstaff
- Table 32a What's good about walking in Flagstaff – details for aesthetics

27 **What could be done to improve walking in Flagstaff**

- Table 33 What could be done to improve walking in Flagstaff
- Table 33a What could be done to improve walking in Flagstaff – details for sidewalks
- Table 33b What could be done to improve walking in Flagstaff – details for crossings

Bicycling results

29 Locations where it is difficult or uncomfortable to bike

29 All locations

Table 34 Least comfortable/most difficult places to bike, by type of location
Table 35 Least comfortable/most difficult places to bike, all locations
Table 36 Factors that make biking difficult or uncomfortable
Table 36a Factors that make biking difficult or uncomfortable – details for bike lanes
Table 36b Factors that make biking difficult or uncomfortable – details for traffic
Table 36c Factors that make biking difficult or uncomfortable – details for maintenance
Table 36d Factors that make biking difficult or uncomfortable – details for FUTS trails
Table 36e Factors that make biking difficult or uncomfortable – details for traffic control
Table 36f Factors that make biking difficult or uncomfortable – details for crossings

32 Streets

Table 37 Least comfortable/most difficult streets for biking
Table 38 Factors for streets that make biking difficult or uncomfortable
Table 38a Factors for streets that make biking difficult or uncomfortable – Milton Road
Table 38b Factors for streets that make biking difficult or uncomfortable – Butler Avenue
Table 38c Factors for streets that make biking difficult or uncomfortable – Route 66

34 Intersections

Table 39 Least comfortable/most difficult intersections for biking
Table 40 Factors for intersections that make biking difficult or uncomfortable

35 Neighborhoods

Table 41 Least comfortable/most difficult neighborhoods for biking
Table 42 Factors for neighborhoods that make biking difficult or uncomfortable

35 FUTS trails

Table 43 Least comfortable/most difficult FUTS trails for biking
Table 44 Factors for FUTS trails that make biking difficult or uncomfortable

36 Specific issues and locations

Table 45 Locations where no bike lane or bike lane ends is an issue
Table 46 Locations where maintenance is an issue
Table 47 Locations where driver behavior is an issue
Table 48 Locations where traffic is an issue

Table 49 Locations where turning vehicles are an issue

37 **Locations where it is good to bike**

37 *All locations*

Table 50 Good places to bike, by type of location

Table 51 Good places to bike, all locations

Table 52 Factors that make it good to bike

39 *FUTS trails*

Table 53 Good FUTS trails for biking

Table 54 Factors for FUTS trails that make it good to bike

40 *Streets*

Table 55 Good streets for biking

Table 56 Factors for streets that make it good to bike

Table 57 Streets where bike lanes are a positive feature

42 *Neighborhoods*

Table 58 Good neighborhoods for biking

Table 59 Factors for neighborhoods that make it good to bike

Table 59a Factors for neighborhoods that make it good to bike – NAU campus

Table 59b Factors for neighborhoods that make it good to bike – Downtown

43 **What's good about biking in Flagstaff**

Table 60 What's good about biking in Flagstaff

44 **What could be done to improve biking in Flagstaff**

Table 61 What could be done to improve biking in Flagstaff

Table 61a What could be done to improve biking in Flagstaff – details for bike lanes

Table 61b What could be done to improve biking in Flagstaff – details for FUTS trails

Table 61c What could be done to improve biking in Flagstaff – details for maintenance

Table 61d What could be done to improve biking in Flagstaff – locations for maintenance

Table 61e What could be done to improve biking in Flagstaff – details for education

Table 61f What could be done to improve biking in Flagstaff – details for infrastructure

Table 61g What could be done to improve biking in Flagstaff – details for enforcement

Table 61h What could be done to improve biking in Flagstaff – details for supportive laws

Introduction

This working paper summarizes the results of the walking and biking survey conducted by the City of Flagstaff and Flagstaff Metropolitan Planning Organization in the summer of 2014.

The survey was undertaken in support of the City's process to prepare pedestrian, bicycle, and FUTS master plans and is intended to gather information about walking and biking in Flagstaff from the community. More specifically, information gathered from the survey can help to:

- Identify specific locations in Flagstaff – streets, intersections, neighborhoods – where there are problems with walking and biking, as well as those places where walking and biking is enjoyable
- Gain a better understanding of the reasons why these places are good or not-so-good for walking and bicycling
- Isolate the factors, from the public's perspective, that encourage people to walk or bike, and
- Solicit suggestions from the community regarding how walking and bicycling in Flagstaff can be improved.

The survey

Questions

A copy of the survey form, taken from the City's website, is included as an appendix to this document. The bulk of the survey was comprised of four open-ended questions that were repeated for walking and for bicycling:

- Where is it difficult or uncomfortable to walk (bike) in Flagstaff, and what makes it difficult or uncomfortable to walk (bike) there?
- Where is it good to walk (bike) in Flagstaff, and what makes it good to walk (bike) there?
- What do you like about walking (biking) in Flagstaff?
- What could be done to improve walking (biking) in Flagstaff?

For each question, respondents were able to list up to five locations or responses.

Survey questions were purposefully made open-ended so that respondents could list any location, reason or suggestion, rather than select from predetermined lists of responses as would be the case in multiple-choice questions. This structure made it more time-consuming and complicated to compile results, but there is more certainty that the results have not been influenced or limited by pre-determined choices.

Outreach

The survey was available from May through September of 2014. An on-line version was posted on the City's website, and a paper version was also made available. The survey was publicized in several ways:

- Invitations to take the survey were posted on the Facebook page for the Flagstaff Urban Trails System several times over the course of the summer.
- Email invitations were sent on several occasions to individuals who signed up for the "Notify Me" function on the City's website for Pedestrian Advisory Committee, Bicycle Advisory Committee, and Flagstaff Urban Trails System.
- Several organizations outside the City, including Flagstaff Biking Organization and Friends of Flagstaff's Future, helped publicize the survey to their membership.

Additionally, North Country Health Care's Hermosa Vida project helped distribute the survey in an effort to reach populations that are typically underrepresented in walking and biking surveys, including residents of low-income neighborhoods, individuals with limited English proficiency, and non-white populations. As part of this effort, Hermosa Vida translated the survey into Spanish and made it available at a variety of community events. Hermosa Vida is a program of the North Country HealthCare that promotes healthy lifestyles in Flagstaff's low income neighborhoods.

Response

A total of 458 completed surveys were submitted. This is generally a higher number of responses than other City surveys of this nature, especially given that the survey took some time and effort for respondents to complete. The open-ended structure of the survey, combined with a relatively high number of responses, provides a wealth of information about walking and biking in Flagstaff.

Organization of this report

Survey results are organized in this document in the following manner:

- Walking and biking results are included in separate sections, and results are presented for each of the four basic questions.
- For the location-based questions, all of the locations that were listed are categorized by the type of location, which generally include street corridors, intersections, neighborhoods, FUTS trails, and parks. Survey results are broken out for each type of location.
- The reasons given why places are good or bad for walking are summarized by general category, and are presented for all locations as well as for each type of location. The results can show for example if the reasons why people are uncomfortable walking at intersections are different from the reasons why they are uncomfortable walking along street corridors.

- Results are broken out for locations that were mentioned frequently in the survey. This make it possible to compare, for example, the reasons why people enjoy bicycling on the NAU campus to the reasons why biking is good in Buffalo Park.
- In other cases, issues or features that are mentioned frequently can be isolated and tabulated by location to highlight places where it is particularly problematic. For example, the results can show on which street corridors the lack of sidewalks is a significant issue.

Demographics of survey respondents

In order to assess how closely the demographic composition of survey respondents matches the general population of Flagstaff, respondents were asked to indicate their gender, race, and age. The survey made clear that answering these questions was completely voluntary.

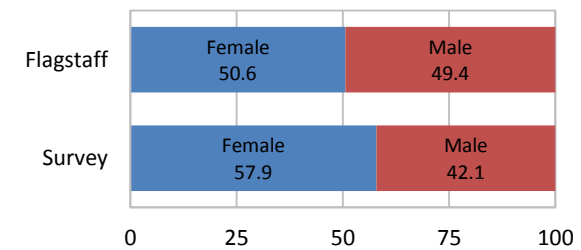
Gender

Table 1 **Gender of survey respondents**

	Number	Percent	Flagstaff
Female	261	57.9	50.6
Male	190	42.1	49.4
Total	451	100.0	100.0

Compared to the general population of Flagstaff, female respondents are somewhat over-represented, and male respondents are under-represented in the survey.

Figure 1 **Gender of survey respondents**



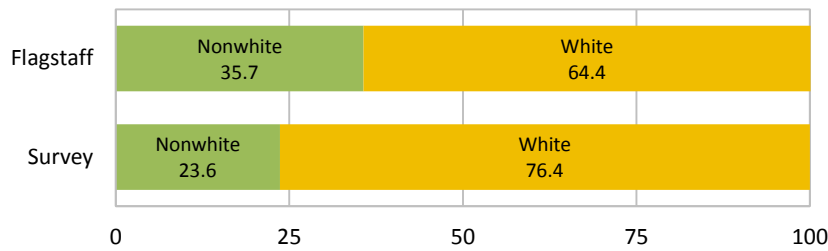
Race

Non-white survey respondents are underrepresented in the survey compared to the general population. A total of 23.6 percent of survey respondents indicated that they are other than white (or two or more races), compared to 35.7 percent in the general population of Flagstaff.

Table 2 **Race of survey respondents**

	Number	Percent	Flagstaff
White	336	76.4	64.4
Hispanic or Latino	44	10.0	18.4
Native American/Am. Indian	30	6.8	11.0
Two or more races	19	4.3	2.3
Other race	7	1.6	0.2
Asian / Pacific Islander	4	0.9	2.0
Black or African American	0	0.0	1.8
Total	440	100.0	100.0

Figure 2 **Race of survey respondents**



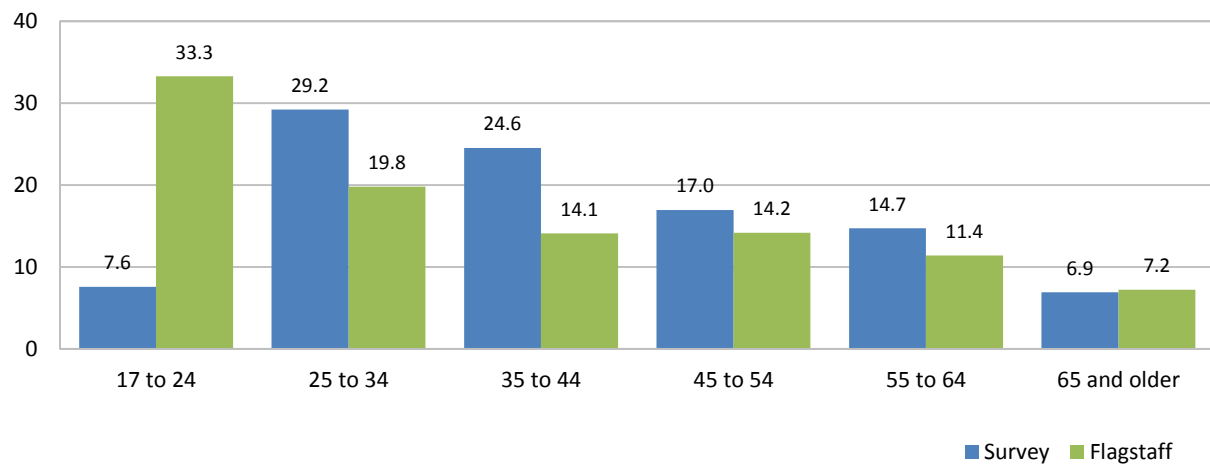
Age

Survey respondents are significantly under-represented in the 17 to 24 age category, and somewhat over-represented in the 25 to 34 and 35 to 44 age groups.

Table 3 **Survey respondents by age group**

	Number	Percent	Flagstaff
17 to 24	34	7.6	33.3
25 to 34	131	29.2	19.8
35 to 44	110	24.6	14.1
45 to 54	76	17.0	14.2
55 to 64	66	14.7	11.4
65 to 74	24	5.4	5.0
75 to 84	7	1.6	2.3
Total	448	100.0	100.0

Figure 3 **Survey respondents by age group**



Walking and biking frequency

Respondents were also asked to indicate how often they walk or bike for recreation, exercise, or transportation. Respondents appear to be active and frequent walkers and bicyclists, which is not a surprising result given that more avid walkers and bikers would be more motivated to respond to a survey of this nature.

- Nearly 40 percent of respondents walk almost every day, and close to 30 percent bike almost every day. Almost every day was defined in the survey as more than 25 days per month, on average.
- Half of respondents (50.0 percent) ride a bike more than 15 times a month, and close to two-thirds (62.4 percent) of respondents walk at least 15 days a month.
- Only 6.1 percent of respondents indicated that they almost never walk, and only 18 percent indicated that they almost never ride a bicycle.

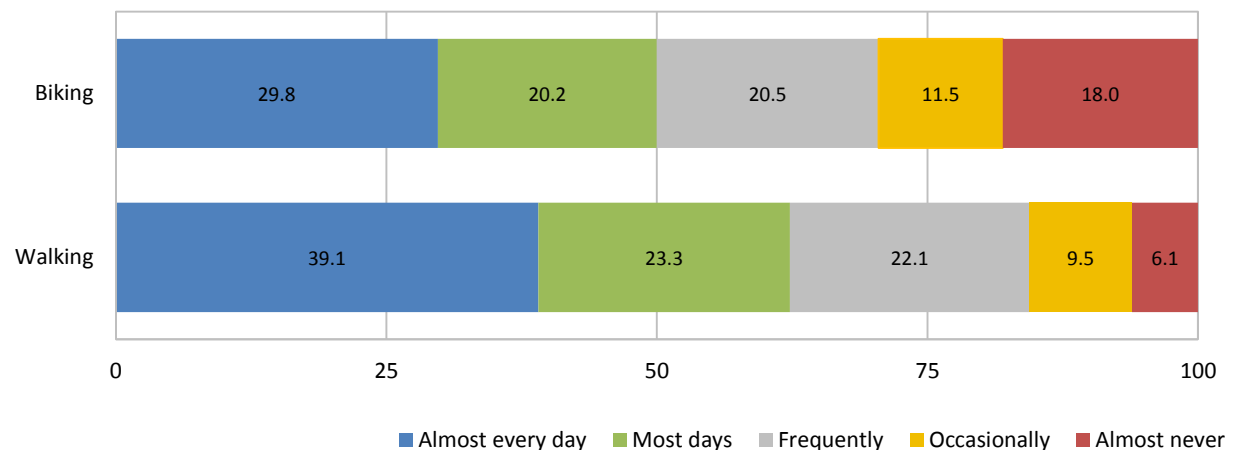
Table 4 **Walking frequency for survey respondents**

	Number	Percent
Almost every day (more than 25 days/month)	173	39.1
Most days (15 to 25 days/month)	103	23.3
Frequently (5 to 15 days/month)	98	22.1
Occasionally (1 to 5 days/month)	42	9.5
Almost never (0 to 1 days/month)	27	6.1
Total	443	100.0

Table 5 **Bicycling frequency for survey respondents**

	Number	Percent
Almost every day (more than 25 days/month)	122	29.8
Most days (15 to 25 days/month)	83	20.2
Frequently (5 to 15 days/month)	84	20.5
Occasionally (1 to 5 days/month)	47	11.5
Almost never (0 to 1 days/month)	74	18.0
Total	410	100.0

Figure 4 **Walking and bicycling frequency for survey respondents**



Summary of findings

Walking results

- 1 The most significant issues for pedestrians (in order) are missing sidewalks, traffic, too few/no crossings, driver behavior, sidewalk maintenance, and crossing difficulty (Table 8).
- 2 Sidewalks are the most fundamental and most important facility for walking.
 - Issues with sidewalks – including missing sidewalks and poor maintenance – account for almost one-third (31.7 percent) of all the reasons given why walking is difficult or uncomfortable at problem locations (Table 8).
 - Within the category of sidewalk issues, missing sidewalks and sidewalks that end are the most prevalent problems, and account for one out of five (20.3 percent) of all the reasons given why walking is difficult or uncomfortable at problem locations (Table 8).
 - When asked what could be done to improve walking, more than a quarter of the suggestions (27.6 percent) concerned sidewalks (Table 33).
 - For locations where respondents reported that it is good to walk, the second most-cited reason why is the presence of sidewalks, representing 16.7 percent of all of the reasons given (Table 23).
- 3 Getting across intersections and streets is a common problem for pedestrians.
 - Respondents cited issues with crossings a total of 176 times, which comprises 18.6 percent of all the reasons given why places are difficult or uncomfortable for walking. The most significant specific crossing issue is too few or no crossings, which was listed 112 times (11.8 percent of all reasons). Other crossing difficulties, which include signal issues, prohibitions on pedestrian crossings, and poor visibility represent 6.8 percent of the reasons given (Tables 8 and 8b).
 - Improvements to crossings were referenced in 14.1 percent of the responses to the question regarding what can be done to improve walking in Flagstaff. This was the second-most cited suggestion, behind only sidewalk improvements (Table 33). Specific suggestions for crossings include provision of additional crossings and crosswalks and installation of flashing beacons for pedestrians (Tables 33b).
- 4 Traffic and driver behavior are problematic for walking.
 - Traffic was cited in 16.3 percent of the reasons why walking is difficult or uncomfortable, third as a reason behind sidewalk and crossing issues (Table 8). Specific issues related to traffic include volume, speed, and too-frequent driveways and curb cuts (Table 8c).

- Driver behavior is also an issue for pedestrians, representing 7.9 percent of the reasons given for pedestrian difficulty (Table 8). The most-often cited issue is failure to yield to crossing pedestrians, which totals 53 out of the 75 reasons related to driver behavior (70.7 percent). Other issues include aggressive driving (16.0 percent) and driver inattention or distraction (13.3 percent of driver behavior issues) (Table 8d).
- For those places where respondents said it was good to walk, little traffic or slow traffic is one of the main reasons. Little or slow traffic was listed 78 times as a positive factor, representing 7.2 percent and placing it fifth-highest on the list of all of all factors.

5 Aesthetic considerations contribute to a positive walking environment.

- For locations where it is good to walk, the most-given reason why is aesthetic considerations at 19.5 percent, or 210 out of 1079 total reasons (Table 23).
- When asked what's good about walking in Flagstaff, more than 1 in 5 responses (21.6 percent) cited aesthetic considerations. This was the most-frequently given response to this question by a large margin (Table 32).
- Aesthetic considerations include open space and green space, scenery and views, trees and greenery, peace and quiet, as well as interesting neighborhoods.

6 Our favorite places to walk are downtown Flagstaff, Buffalo Park, and FUTS trails (Table 22).

- Downtown Flagstaff was mentioned most often in the survey as a good place to walk, by 41.2 percent of respondents (139 out of 337) comprising 18.4 percent of all locations that are good for walking (Table 22). Survey respondents cited the presence of sidewalks, good crossings and signals for pedestrians, positive aesthetics, and little or slow traffic as promoting the walkable environment downtown (Table 25a).
- A total of 27.3 percent of respondents (92 out of 337) listed Buffalo Park as a good place to walk, representing 12.2 percent of good walking locations (Table 22). Aesthetics considerations are the primary reason; other reasons that make Buffalo Park good for walking include the lack of vehicles and presence of the FUTS trail (Table 29a).
- The FUTS trail system is the third most-favorite place to walk in Flagstaff at 22.3 percent of respondents (75 of 337) and 9.9 percent of locations (Table 22). In this case respondents listed FUTS trails in general without naming a specific trail. Specific FUTS trails were named in 113 other surveys in response to this question.

7 The most difficult or least comfortable places to walk in Flagstaff are three street corridors: Milton Road, Route 66, and Fourth Street (Table 7).

- According to respondents, Milton Road is the most uncomfortable location for walking by a considerable margin. Nearly a quarter of respondents (76 out of 322, 23.6 percent) listed Milton

Road as a difficult or uncomfortable place to walk, and Milton Road comprises 11.3 percent of all locations (Table 7). Reasons for the difficulty and discomfort include traffic, crossing difficulty, and sidewalk issues (Table 10a).

- Route 66 was a distant second, with 43 of 322 respondents (13.4 percent) and representing 6.4 percent of locations (Table 7). Significant problems include crossing difficulty, sidewalk issues, and traffic (Table 10c).
- Close behind is Fourth Street at 42 of 322 respondents (13.0 percent) and 6.2 percent of locations (Table 7). Problems along Fourth Street are sidewalk issues, traffic, and crossing difficulty (Table 10b).

8 FUTS trails are an important component of the pedestrian infrastructure

- In response to the question about where it is good to walk in Flagstaff, FUTS trails represent a quarter (24.9 percent) of all the locations indicated by respondents (Table 21).
- Among locations where it is good to walk, the FUTS trail system in general was cited third-most frequently at 9.9 percent of all locations (Table 22). Other individual trails that placed in the top 15 locations include the Karen Cooper Trail (4.0 percent), the Route 66 Trail (2.1 percent), the Fort Valley Trail (1.7 percent), and the Sinclair Wash Trail (1.6 percent) (Table 22).
- When respondents gave their reasons why places are good for walking, FUTS is third on the list, at 8.4 percent of all factors (Table 23).
- FUTS is also sixth on the list of what's good about walking in Flagstaff, with 7.2 percent of all responses (Table 32).
- FUTS is third on the list of what could be done to improve walking in Flagstaff, with a total of 53 responses or 9.0 percent of all suggestions (Table 33).

9 Maintenance and upkeep of sidewalks is also an issue for pedestrians.

- Poor sidewalk condition, snow, cinders, and debris on sidewalks, and sidewalk obstructions were mentioned 70 times in the survey and represent 7.4 percent of all of the reasons why walking is difficult or uncomfortable at different locations (Tables 8 and 8a).

Bicycling results

- 1 The most significant issues for bicyclists (in order) are missing bike lanes or bike lanes that end, traffic and driver behavior, and maintenance (Table 35).
- 2 Bike lanes are the most fundamental and most important facility for bicycling.

- Missing bike lanes or bike lanes that end account for almost a quarter (23.1 percent) of the reasons given for why bicycling is difficult or uncomfortable at different locations (Table 36). This is the most-given reason.
- Bike lanes that are not wide enough is fifth on the list of reasons at 5.9 percent or 89 out of 1496 total reasons (Table 36).
- For locations where it is good to bike, the presence of bike lanes are the most-given reason for why it is good, representing 21.4 percent of all of the reasons (Table 51).
- Enhancements to bike lanes was the most common suggestion for what could be done to improve bicycling. A total of 134 out of 627 total suggestions (21.1 percent) concerned bike lanes, which was almost twice the number for the second-place suggestion (FUTS trails at 11.3 percent) (Table 61). Specific suggestions included more bike lanes, wider bike lanes, protected bike lanes, and continuation of bike lanes that end (Table 61a).

3 Traffic and driver behavior are both a problem for bicyclists.

- Traffic is second on the list of reasons why bicycling is difficult or uncomfortable at different locations, and was cited 259 times or 17.3 percent of all reasons (Table 36).
- Driver behavior is third on the list of factors, with 128 responses representing 8.6 percent of all reasons (Table 36).
- Problems with turning vehicles was seventh on the list of reasons for bicyclist difficulty or discomfort, with 55 total responses and 3.7 percent of all reasons (Table 36).
- Respondents reported that Milton Road has the worst traffic problems for bicyclists, by a wide margin. Traffic issues on Milton were cited 67 times; the next-worst road was Butler Avenue with 34 responses (Table 48).
- Locations where respondents indicated that driver behavior is a problem for bicyclists include Milton Road, San Francisco Street, Route 66, and downtown Flagstaff (Table 47)
- For locations where it is good to bike, the absence of vehicles was the second-most reason given for why at 14.5 percent of all reasons, and little or slow traffic was the third-most common factor at 12.0 percent (Table 51). The absence of vehicles was typically given as a positive factor for bicycling on FUTS trails.

4 Maintenance could be improved to better accommodate bicyclists.

- Issues with maintenance was the fourth most-mentioned reason why bicycling is difficult or uncomfortable at different locations, with 109 responses and 10.5 percent of all factors (Table 38). Common issues with maintenance include the pavement condition of the street (68.3

percent of maintenance issues), and snow and debris in bike lanes (29.3 percent of maintenance issues) (Table 36c).

- Streets where maintenance is most frequently indicated as an issue for bicyclists are Fort Valley Road and Route 66 (Table 46). It is worth noting that since the survey was conducted, ADOT has resurfaced Fort Valley Road through Flagstaff to Snowbowl Road.
- For what could be done to improve bicycling in Flagstaff, the third-most common suggestion was better maintenance at 65 responses representing 10.4 percent of all responses (Table 61).
- Specific issues with maintenance include debris in bike lanes and on streets, pavement condition of streets, snow removal from bike lanes, and bike lanes markings (Table 61c). Facilities where maintenance is needed are bike lanes (62.9 percent of maintenance suggestions), streets (25.8 percent), and FUTS trails (11.3 percent) (Table 61d).

5 FUTS trails are an important component of the bicycle infrastructure.

- On the list of reasons why places are difficult or uncomfortable for biking (Table 36), FUTS trails that are missing or end abruptly is sixth on the list, with 56 responses representing 3.7 percent of all reasons. Other issues with FUTS were mentioned 37 times, or 2.5 percent of all factors.
- For places that are good for biking, FUTS trails represent 40.6 percent of all the locations given (264 of 650 locations) (Table 50).
- The presence of FUTS is fourth-highest on the list of factors that make it good to bicycle in different locations, with 80 responses representing 10.3 percent of all reasons (Table 51).
- When asked what's good about bicycling, respondents' top answer is FUTS trails with 13.2 percent of all responses (Table 60).
- When asked what could be done to improve biking, the second-most frequent suggestion was FUTS trails with 71 responses representing 11.3 percent of all responses (Table 61).
- The Route 66 FUTS Trail was cited most often as a good place to ride (95 responses representing 15.8 percent of all locations), followed by FUTS in general (no specific trail was named) with 92 responses and 15.1 percent of all locations. Other FUTS on the list of good places to bike are the Karen Cooper Trail, Cedar Trail, and Fort Valley Trail (Table 52)
- The absence of vehicles (34.0 percent), access and connectivity to destinations (15.8 percent), and a width sufficient to accommodate multiple uses and users (11.9 percent) are cited as factors that make the FUTS good places for bicycling (Table 54).

6 Our overall best places for bicycling are the Route 66 FUTS Trail, FUTS trails in general, the NAU campus, downtown Flagstaff, Lake Mary Road, and Beaver St/San Francisco St (Table 52).

- A third of respondents (95 out of 292, or 32.5 percent) listed the Route 66 FUTS Trail as a good place to bike. This represents 15.6 percent of all locations provided in answer to the question about good locations for bicycling.
 - Another 92 respondents said that FUTS trails in general are good for bicycling, without naming a particular trail. This represents 31.5 percent of all respondents and 15.1 percent of all locations.
 - The NAU campus is third on the list, and downtown Flagstaff is fourth, with 54 and 49 mentions, respectively.
 - Lake Mary Road garnered 40 mentions (13.7 percent of respondents, 6.6 percent of locations) to place it fourth-highest on the list.
 - Beaver Street and San Francisco Street were fifth and sixth; in combination the streets were mentioned by 21.2 percent of respondents (62 out of 292) and are 10.2 percent of all locations.
- 7 The most difficult and least comfortable places to bicycle in Flagstaff are Milton Road, Butler Avenue, Route 66, and downtown Flagstaff (Table 35).
- Milton Road is exceptionally problematic for bicyclists. The street was cited by almost half of respondents to the question regarding difficult or uncomfortable locations for bicycling (165 out of 338 respondents, 48.8 percent). Milton Road represents 17.5 percent of all of the locations given.
 - Milton Road also appears at the top of the lists for locations where no bike lanes or bike lanes ends is an issue, where driver behavior is an issue, where traffic is an issue, and where turning vehicles are an issue for bicyclists (Tables 45, 47, 48, and 49).
 - Butler Avenue is a distant second on the list of places that are difficult or uncomfortable for bicycling, and was cited by 21.3 percent of respondents (72 out of 338) and represents 7.6 of all locations given.
 - Route 66 was included on 64 surveys (18.9 percent of respondents, 6.8 percent of locations), and downtown Flagstaff was listed on 62 surveys (18.3 percent of respondents, 6.6 percent of locations), placing them at third and fourth on the list.
- 8 Survey respondents recognize the need for more education and enforcement for both motorists and bicyclists.
- When asked what could be done to improve bicycling in Flagstaff, 10 percent of the suggestions called for more education (Table 61). Of the 63 suggestions for more education, 26 responses reference education for motorists, 16 responses reference education for bicyclists, and 12 responses reference both (Table 61e).

- Another 5.3 percent of responses call for better enforcement (Table 61). Of the 33 responses, 16 responses reference bicyclists, 8 reference motorists, and 9 reference both motorists and bicyclists (Table 61g).

Walking results

Locations where it is difficult or uncomfortable to walk

Survey respondents were asked to list up to five locations where they find it difficult or uncomfortable to walk, and to indicate what makes it difficult or uncomfortable to walk there. A total of 322 individuals submitted 673 responses to this questions, representing 156 unique locations and 947 reasons why walking is difficult or uncomfortable at these locations.

All locations

Locations submitted by respondents have been categorized by type for the purposes of analysis and are listed in Table 6. Survey results for each type of location are provided in a series of tables below.

- Street corridors were mentioned most frequently as problematic for walking, with 365 street locations representing 54.2 percent of all responses.
- Intersections were second-most problematic at 17.1 percent, followed by neighborhoods with 10.8 percent of responses.

Table 6 Least comfortable/most difficult places to walk, by type of location

	Number	Percent
Street corridor	365	54.2
Intersection	115	17.1
Neighborhood	73	10.8
FUTS	42	6.2
Citywide	33	4.9
Park	19	2.8
Forest Service	6	0.9
RR crossing	5	0.7
Outside city	5	0.7
Other	10	1.5
Total	673	100.0

Table 7 Least comfortable/most difficult places to walk, all locations

	Number	Percent
Milton Rd	76	11.3
Route 66	43	6.4
Fourth St	42	6.2
Citywide	35	5.2
Butler Ave	23	3.4
San Francisco St	17	2.5
Sunnyside	16	2.4
Milton/Butler	15	2.2
Fort Valley/Forest	14	2.1
Fort Valley Rd	13	1.9
Downtown	12	1.8
Karen Cooper Trail	11	1.6
Other	356	52.9
Total	673	100.0

Specific locations where it is difficult or uncomfortable to walk are listed in Table 7.

- Milton Road was mentioned by almost a quarter of respondents (76 out of 322). This represents 11.3 percent of all the locations listed.

- Other locations that were mentioned frequently include Route 66 (6.4 percent of all locations) and Fourth Street (6.2 percent of all locations).

Table 8 Factors that make walking difficult or uncomfortable

	Number	Percent
No sidewalk	192	20.3
Traffic	154	16.3
Too few/no crossings	112	11.8
Driver behavior	75	7.9
Sidewalk maintenance	70	7.4
Crossing difficulty	64	6.8
Sidewalk narrow/no buffer	38	4.0
Intimidation	38	4.0
Lighting	33	3.5
Poor aesthetics	23	2.4
Limited access	22	2.3
Grade	15	1.6
Narrow/no shoulder	12	1.3
Street maintenance	12	1.3
Bikes on sidewalk	12	1.3
FUTS maintenance	11	1.2
Lack of shade	7	0.7
Safety concerns	7	0.7
Poor visibility	5	0.5
Distance	4	0.4
Dogs	3	0.3
No signing	3	0.3
Other	35	3.7
Total	947	100.0

Table 8 summarizes the reasons respondents gave as to why walking is difficult or uncomfortable at the locations they listed.

- The absence of sidewalks is the most significant factor and is referenced a total of 192 times, or 20.3 percent of all the reasons given.
- Other significant factors for pedestrians include traffic (154 mentions, 16.3 percent) and too few or no crossings (112 mentions, 11.8 percent).
- Concerns about driver behavior were mentioned 75 times in the survey, representing 7.9 percent of all responses to this question.
- Intimidation, which was cited as a factor for walking by 38 respondents, is used in this context to describe the presence of individuals who are perceived by walkers as a potential threat.

Several of the more-frequently given reasons, including sidewalk issues, crossing difficulties, traffic, and driver behavior, can be further divided into more specific factors to better understand the nature of the problem. Tables 8a through 8d below provide a breakdown of these factors.

- For sidewalks, missing sidewalks is by far the most significant issue and represents 64 percent of all sidewalk issues cited by respondents. Poor condition, snow and debris on sidewalks, and inadequate width are also issues.
- Most crossing difficulties (a combined 63.7 percent of all responses) refer to situations where there is no crossing or too few crossings provided. Other crossing issues include signal issues (for example

not having enough time to cross), prohibitions on pedestrian crossings at some intersections, and general difficulty with getting across a street or intersection.

- Traffic issues most often refer to the volume and speed of traffic, which in combination make up 65.6 percent of traffic issues.
- Motorists who do not yield to pedestrians make up 70.7 percent of concerns with driver behavior. Other concerns are aggressive driving and inattention/distraction.

Table 8a Factors that make walking difficult or uncomfortable – details for sidewalks

	Number	Percent
No sidewalk	192	64.0
Poor condition	28	9.3
Snow/debris	27	9.0
Too narrow	24	8.0
Obstructions	15	5.0
No buffer from street	14	4.7
Total	300	100.0

Table 8b Factors that make walking difficult or uncomfortable – details for crossings

	Number	Percent
Too few crossings	86	48.9
Difficult crossing	33	18.8
No crossing	26	14.8
Signal issues	13	7.4
Prohibition on crossing	12	6.8
Poor visibility	6	3.4
Total	176	100.0

Table 8c Factors that make walking difficult or uncomfortable – details for traffic

	Number	Percent
Volume	55	35.7
Speed	46	29.9
General	23	14.9
Curb cuts	14	9.1
Noise	10	6.5
Exhaust	6	3.9
Total	154	100.0

Table 8d Factors that make walking difficult or uncomfortable – details for driver behavior

	Number	Percent
Failure to yield	53	70.7
Aggressive driving	12	16.0
Inattention/distraction	10	13.3
Total	75	100.0

Streets

Table 9 lists street corridors that were most frequently referenced as difficult or uncomfortable for walking. Table 10 summarizes the factors given by respondents that make walking along these streets difficult.

- According to respondents, Milton Road is the most difficult/least comfortable street for walking with 76 responses representing 20.8 percent of all street locations.
- Route 66 at 11.8 percent of street locations and Fourth Street at 11.5 are also problematic streets for walking.

- Problems with sidewalks is the most significant issue along street corridors and represent 41.7 percent of factors for streets. The other two significant issues are traffic at 19.4 percent and crossing difficulties at 17.9 percent.

Table 9 Least comfortable/most difficult streets for walking

	Number	Percent
Milton Rd	76	20.8
Route 66	43	11.8
Fourth St	42	11.5
Butler Ave	23	6.3
San Francisco St	17	4.7
Fort Valley Rd	13	3.6
University Ave	9	2.5
Pine Knoll Dr	9	2.5
Lone Tree Rd	9	2.5
Beaver St	8	2.2
McConnell Dr	8	2.2
Cedar Ave	7	1.9
Beulah Blvd	7	1.9
Humphreys St	6	1.6
Lake Mary Rd	5	1.4
Solier Ave	5	1.4
Country Club Dr	5	1.4
Other streets	73	20.0
Total	365	100.0

Table 10 Factors for streets that make walking difficult or uncomfortable

	Number	Percent
Sidewalk issues	228	41.7
Traffic	106	19.4
Crossing difficulty	98	17.9
Driver behavior	22	4.0
Maintenance	14	2.6
Lighting	12	2.2
Narrow/no shoulder	11	2.0
Poor aesthetics	9	1.6
Lack of shade	6	1.1
Limited access	5	0.9
Grade	5	0.9
Intimidation	5	0.9
Bikes on sidewalk	5	0.9
Other	21	3.8
Total	547	100.0

Tables 10a through 10c below list the factors for the three least comfortable streets for walking: Milton Road, Fourth Street, and Route 66. This helps isolate and identify walkability issues for individual streets.

- For Milton Road, traffic is listed as the greatest problem, followed by crossing difficulties and sidewalk issues. Sidewalk are present along most of Milton, although they are narrow, in poor condition in many locations, and have no buffer from street traffic.
- For Fourth Street, crossing difficulties and sidewalk issues were mentioned a few more times than traffic. Sidewalks are missing from most of the east side of the street from Route 66 to Cedar Avenue/Lockett Road.
- For Route 66, sidewalk issues, traffic, and crossing difficulties were all given about equal weight as problems.

Table 10a Factors for streets that make walking difficult or uncomfortable – Milton Road

	Number	Percent
Traffic	44	33.3
Crossing difficulty	32	24.2
Sidewalk issues	31	23.5
Driver behavior	7	5.3
Other	18	13.6
Total	132	100.0

Table 10b Factors for streets that make walking difficult or uncomfortable – Fourth Street

	Number	Percent
Crossing difficulty	25	30.5
Sidewalk issues	24	29.3
Traffic	19	23.2
Poor aesthetics	5	6.1
Other	9	11.0
Total	82	100.0

Table 10c Factors for streets that make walking difficult or uncomfortable – Route 66

	Number	Percent
Sidewalk issues	17	27.9
Traffic	16	26.2
Crossing difficulty	15	24.6
Other	13	21.3
Total	61	100.0

For Table 11, 12, and 13 below, locations are highlighted where respondents indicated that missing sidewalks, too few crossings, and traffic are an issue.

- Missing sidewalks were cited most frequently as a problem on Butler Avenue (15 mentions, or 9.7 percent of all streets where missing sidewalks is an issue), Fourth Street (14 mentions, 9.1 percent), Route 66 (13 mentions, 8.4 percent), Pine Knoll Drive (11 mentions, 7.1 percent), and San Francisco Street (10 mentions, 6.5 percent).
- Problems with too few crossings along a corridor are most prevalent on Milton Road and Fourth Street. Survey respondents cited too few/no crossings on Milton Road 31 times (36.5 percent of all streets where too few/missing sidewalks is an issue), and 22 times for Fourth Street (25.9 percent).
- Milton Road was most often referenced as a street with traffic concerns and represents 41.5 percent of all streets where traffic is an issue. Fourth Street at 17.9 percent and Route 66 at 15.1 percent also have traffic concerns for walking.

Table 11 Streets where no sidewalks is an issue

	Number	Percent
Butler Ave	15	9.7
Fourth St	14	9.1
Route 66	13	8.4
Pine Knoll Dr	11	7.1
San Francisco St	10	6.5
University Ave	8	5.2
McConnell Dr	8	5.2
Lone Tree Rd	6	3.9
Other streets	69	44.8
Total	154	100.0

Table 12 Streets where too few or no crossings is an issue

	Number	Percent
Milton Rd	31	36.5
Fourth St	22	25.9
Route 66	11	12.9
Fort Valley Rd	8	9.4
Other streets	13	15.3
Total	85	100.0

Table 13 Streets where traffic is an issue

	Number	Percent
Milton Rd	44	41.5
Fourth St	19	17.9
Route 66	16	15.1
Butler Ave	8	7.5
Other	19	17.9
Total	106	100.0

Intersections

Table 14 lists the intersections in Flagstaff that respondents indicated are the least walkable, and Table 15 summarizes the reasons why walkability is a problem at those intersections.

- The intersection at Milton Road/Butler Avenue was mentioned by 15 respondents, and the intersection at Fort Valley Road/Forest Avenue was mentioned 14 times.
- Other intersections that were mentioned at least five times include Milton Road/Phoenix Avenue, Route 66/Santa Fe Avenue/Sitgreaves Street, and Butler Avenue/Humphreys Street.
- Crossing difficulty is the most common problem at intersections, cited 64 times and representing 40.8 percent of all factors for intersections. Other significant issues for intersections include driver behavior at 28.7 percent and traffic at 17.2 percent.

Table 14 Least comfortable/most difficult intersections for walking

	Number	Percent
Milton/Butler	15	13.0
Fort Valley/Forest	14	12.2
Route 66/Beaver	7	6.1
Milton/Phoenix	6	5.2
Route 66/Santa Fe/Sitgreaves	5	4.3

Butler/Humphreys	5	4.3
Other intersections	63	54.8
Total	115	100.0

Table 16 isolates intersections where respondents said there is an issue with motorists failing to yield to pedestrians.

- Three intersections were mentioned at least five times in the survey; Fort Valley Road/Forest Avenue, Milton Road/Butler Avenue, and Butler Avenue/Humphreys Street.
- There is a marked crosswalk across Fort Valley Road on the south leg of its intersections with Forest Avenue, although there is no traffic control (traffic signal, stop or yield signs) for motorists on Fort Valley Road at this intersection.
- There is a formal pedestrian crossing at the intersection at Butler Avenue and Humphreys Street with a pedestrian-actuated flashing beacon, a median refuge island, and appropriate markings and signing.

Neighborhoods

The most difficult/least comfortable neighborhoods for walking are shown in Table 17, while Table 18 summarizes the factors that make walking in those neighborhoods difficult or uncomfortable.

Table 17 Least comfortable/most difficult neighborhoods for walking

	Number	Percent
Sunnyside	16	21.9
Downtown	12	16.4
Southside	9	12.3
Cherry Hill	7	9.6
Other neighborhood	29	39.7
Total	73	100.0

Table 15 Factors for intersections that make walking difficult or uncomfortable

	Number	Percent
Crossing difficulty	64	40.8
Driver behavior	45	28.7
Traffic	27	17.2
Sidewalk issues	7	4.5
Other	14	8.9
Total	157	100.0

Table 16 Intersections where failure to yield is an issue

	Number	Percent
Fort Valley/Forest	9	22.0
Milton/Butler	9	22.0
Butler/Humphreys	8	19.5
Other intersections	15	36.6
Total	41	100.0

Table 18 Factors for neighborhoods that make walking difficult or uncomfortable

	Number	Percent
Sidewalk issues	42	43.8
Lighting	12	12.5
Poor aesthetics	9	9.4
Intimidation	7	7.3
Traffic	6	6.3
Other	20	20.8
Total	96	100.0

- Four Flagstaff neighborhoods were listed at least five times by respondents. Sunnyside was referenced most frequently (16 times or 21.9 percent of neighborhoods), and downtown Flagstaff was mentioned second-most at 12.
- Sidewalk issues are the most significant walkability issues for neighborhoods, totaling 43.8 percent of all the issues submitted.

FUTS trails

Table 19 lists FUTS trails where respondents find it difficult or uncomfortable to walk, and Table 20 describes the reasons why it is difficult or uncomfortable.

- Respondents listed a total of 10 different FUTS trails in the survey, but only two FUTS trails, the Karen Cooper Trail and the Sinclair Wash Trail, were mentioned more than five times.
- The most common problems for walkability on FUTS trails are maintenance issues and intimidation, which refers to the presence of individuals that other trail users perceive as potentially threatening.

Table 19 Least comfortable/most difficult FUTS trails for walking

	Number	Percent
Karen Cooper Trail	11	26.2
Sinclair Wash Trail	9	21.4
Other FUTS trails	22	52.4
Total	42	100.0

Table 20 Factors for FUTS trails that make walking difficult or uncomfortable

	Number	Percent
Intimidation	12	21.1
Maintenance	11	19.3
Other	34	59.6
Total	57	100.0

Locations where it is good to walk

Survey respondents were asked to list up to five locations where it is good to walk in Flagstaff, and to indicate what makes it good to walk there. A total of 337 individuals submitted 755 responses to this question, representing 106 unique locations and 1079 reasons why walking is enjoyable at those locations.

All locations

For the purposes of further analysis, all of the locations submitted were categorized by general type and are listed in Table 21. Survey results for each type of location are given in subsequent tables below.

- Neighborhoods were most-frequently cited as good places to walk, representing 37.6 percent of all locations, followed by FUTS trails with 24.9 percent and parks with 17.7 percent.
- Street corridors and intersections, which were cited most often as uncomfortable or difficult places to walk (Table 6 above) are mentioned infrequently in response this question. Only 75 responses

(9.9 percent) listed a street, and only 8 responses (1.1 percent) listed an intersection as a good place to walk.

Table 21 Good places to walk, by type of location

	Number	Percent
Neighborhood	284	37.6
FUTS	188	24.9
Park	134	17.7
Streets	75	9.9
Forest Service	30	4.0
Other	24	3.2
Citywide	10	1.3
Intersection	8	1.1
Outside city	2	0.3
Total	755	100.0

Table 22 Good places to walk, all locations

	Number	Percent
Downtown	139	18.4
Buffalo Park	92	12.2
FUTS in general	75	9.9
NAU	57	7.5
Karen Cooper Trail	30	4.0
Townsite	21	2.8
Route 66 Trail	16	2.1
Thorpe Park	15	2.0
Fort Valley Trail	13	1.7
McMillan Mesa	13	1.7
Sinclair Wash Trail	12	1.6
Mt Elden trails	11	1.5
Sunnyside	10	1.3
Southside	10	1.3
Citywide	10	1.3
Cedar Ave	10	1.3
Other	221	29.3
Total	755	100.0

Table 23 Factors that make it good to walk

	Number	Percent
Aesthetics	210	19.5
Sidewalks	180	16.7
FUTS	91	8.4
Access/proximity	89	8.2
Little/slow traffic	78	7.2
Crossings/signals	59	5.5
No vehicles	56	5.2
Walkable	52	4.8
Social	44	4.1
Safety	40	3.7
Maintenance	29	2.7

Shade/trees	22	2.0
Lighting	15	1.4
Grade	13	1.2
Wide streets	12	1.1
Buffer	12	1.1
Activity	11	1.0
Driver Behavior	10	0.9
Space for bikes	10	0.9
Dogs	9	0.8
General	7	0.6
Narrow streets	2	0.2
Other	28	2.6
Total	1079	100.0

Table 23 summarizes the reasons given why walking is good at the submitted locations.

- Aesthetic considerations make up one of every five (19.5 percent) factors. Aesthetic considerations are further described with subcategories in Table 20a.
- About half of the reasons (48.6 percent) in the aesthetics category indicate that locations are generally a pleasant or nice place to walk, without going into further detail or explanation.
- Other responses under aesthetics cite views and scenery, peace and quiet, and open space and nature as positive factors for walking.
- Sidewalks (16.7 percent of all reasons) and FUTS trails (8.4 percent of all reasons) are important features for walkers.
- Reasons related to access and proximity represent 8.2 percent of all factors. Access and proximity covers a number of situations described by respondents, including good or easy access by walking, connectivity to destinations via walking, convenience and ease of walking, and destinations that are nearby.

Neighborhoods

Table 24 lists neighborhoods that were most frequently mentioned as good places to walk, and Table 25 lists the reasons provided by respondents.

- Almost half (49.3 percent) of the responses for neighborhoods list downtown Flagstaff as a good place to walk.
- NAU was the only other neighborhood that received a significant number of votes (57 responses, or 20.1 percent of neighborhoods mentioned).

Table 24 **Good neighborhoods for walking**

	Number	Percent
Downtown	140	49.3
NAU	57	20.1
Townsite	19	6.7
Southside	10	3.5
Sunnyside	10	3.5
Ponderosa Trails	9	3.2
Coconino Estates	7	2.5
Other neighborhoods	32	11.3
Total	284	100.0

Table 25 **Factors for neighborhoods that make it good to walk**

	Number	Percent
Sidewalks	118	25.4
Aesthetics	66	14.2
Little/slow traffic	59	12.7
Crossings/signals	40	8.6
Walkable	31	6.7
Social	30	6.5
Access/proximity	23	4.9
Safety	13	2.8
FUTS	12	2.6
Shade/trees	11	2.4
Activity	10	2.2
Lighting	10	2.2

- The presence and quality of sidewalks in neighborhoods is the most significant factor for walkability, and was mentioned in about of quarter of responses (25.4 percent).
- Aesthetic considerations (14.2 percent) and little or slow traffic (12.7 percent) are also important.
- Other positive factors for neighborhoods that were cited in at least 20 responses include crossings and signals (8.6 percent), general walkability (6.7 percent), social aspects (6.5 percent), and access and proximity (4.9 percent).

Wide streets	8	1.7
Driver Behavior	8	1.7
Space for bikes	7	1.5
Other	19	4.1
Total	465	100.0

Tables 25a and 25b call out the reasons given for walkability in downtown Flagstaff and on the NAU campus.

- For downtown Flagstaff, respondents cited a variety of factors that promote walkability, including sidewalks (24.6 percent), crossings and signals (14.3 percent), aesthetic considerations (12.1 percent), little or slow traffic (11.2 percent), general walkability (8.9 percent), and social aspects (7.6 percent).
- For NAU, the presence and quality of sidewalks were most frequently mentioned.

Table 25a Factors for neighborhoods that make it good to walk - Downtown

	Number	Percent
Sidewalks	55	24.6
Crossings/signals	32	14.3
Aesthetics	27	12.1
Little/slow traffic	25	11.2
Walkable	20	8.9
Social	17	7.6
Activity	8	3.6
Safety	8	3.6
Access/proximity	7	3.1
Driver Behavior	6	2.7
Other	19	8.5
Total	224	100.0

Table 25b Factors for neighborhoods that make it good to walk – NAU campus

	Number	Percent
Sidewalks	22	32.4
Little/slow traffic	9	13.2
Walkable	7	10.3
FUTS	5	7.4
Lighting	5	7.4
Aesthetics	5	7.4
Other	15	22.1
Total	68	100.0

FUTS trails

Table 23 lists FUTS trails that were most frequently mentioned as good places to walk, and Table 24 lists the reasons provided by respondents why it is good to walk there.

- Respondents most frequently mentioned FUTS trails in general (39.9 percent of responses for FUTS trails) without naming a particular trail.
- Of the trails that are specifically named, the highest-rated is the Karen Cooper Trail (16.0 percent), followed by the Route 66 Trail (8.5 percent), Fort Valley Trail (6.9 percent), and Sinclair Wash Trail (6.4 percent).

Table 26 **Good FUTS trails for walking**

	Number	Percent
FUTS in general	75	39.9
Karen Cooper Trail	30	16.0
Route 66 Trail	16	8.5
Fort Valley Trail	13	6.9
Sinclair Wash Trail	12	6.4
McMillan Mesa	8	4.3
Mars Hill Trail	6	3.2
Sego Lily Trail	5	2.7
Foxglenn Trail	5	2.7
Arizona Trail	5	2.7
Other trails	13	6.9
Total	188	100.0

Table 27 **Factors for FUTS trails that make it good to walk**

	Number	Percent
Aesthetics	62	22.1
General	56	19.9
Access/proximity	36	12.8
No vehicles	35	12.5
Maintenance	16	5.7
Walkable	13	4.6
Safety	11	3.9
Grade	10	3.6
Sidewalks	8	2.8
Buffer	7	2.5
Crossings/signals	6	2.1
Shade/trees	5	1.8
Other	16	5.7
Total	281	100.0

- Aesthetic considerations were most frequently cited (22.1 percent of all factors given for FUTS trails) as a reason why FUTS trails are a good place to walk.
- General reasons were a close second at 19.9 percent. In these cases the respondent did not provide specific reasons, other than to indicate that FUTS trails are good places to walk.
- Access and proximity (12.8 percent) and the absence of vehicles (12.5 percent) are also important for FUTS trails.

Parks

Parks that were mentioned as good places to walk are listed in Table 28, and Table 29 lists the factors that make it good to walk there.

- Buffalo Park is respondent's overwhelming favorite for walkable parks, and was referenced in 68.7 percent of all responses that cited parks.
- Aesthetic considerations are the most important factor for walkable parks, and comprise 39.9 percent of all reasons given for parks.

Table 28 **Good parks for walking**

	Number	Percent
Buffalo Park	92	68.7
Thorpe Park	15	11.2
Bushmaster Park	7	5.2
Parks in general	5	3.7
McMillan Mesa	5	3.7
Other parks	10	7.5
Total	134	100.0

Table 29a **Factors for parks that make it good to walk – Buffalo Park**

	Number	Percent
Aesthetics	51	39.8
No vehicles	17	13.3
FUTS	14	10.9
Social	10	7.8
Access/proximity	8	6.3
Maintenance	7	5.5
Safety	7	5.5
Other	14	10.9
Total	128	100.0

Table 29 **Factors for parks that make it good to walk**

	Number	Percent
Aesthetics	73	39.9
FUTS	21	11.5
No vehicles	18	9.8
Access/proximity	14	7.7
Social aspects	10	5.5
Safety	10	5.5
Maintenance	9	4.9
Other	28	15.3
Total	183	100.0

Streets

Table 30 **Good streets trails for walking**

	Number	Percent
Cedar Ave	10	13.3
Route 66	5	6.7
Leroux St	5	6.7
Fort Valley Rd	5	6.7
Other streets	50	66.7
Total	75	100.0

Table 31 **Factors for streets that make it good to walk**

	Number	Percent
Sidewalks	47	46.1
Little/slow traffic	11	10.8
Access/proximity	6	5.9
Walkable	5	4.9
Aesthetics	5	4.9
Other	28	27.5
Total	102	100.0

Table 30 lists streets that were most frequently mentioned as good places to walk, and Table 31 lists the reasons provided by respondents why it is good to walk there.

- A total of 33 different streets were named in response to this question, but only Cedar Avenue was included on more than five responses (10 total, or 13.3 percent of responses for streets).

- Sidewalks are the most important factor for walkable streets, and represent almost half (46.1 percent) of reasons given for streets.

What's good about walking in Flagstaff

Survey respondents were asked to list up to five things they like about walking in Flagstaff. A total of 297 individuals listed 823 positive features, which are summarized below in Table 32.

- Aesthetic considerations were cited most often, and represent 21.6 percent of all the responses to this question.
- Aesthetic considerations are divided into subcategories in Table 32a. More specific aesthetic considerations include views and scenery, open space and nature, trees and vegetation, peace and quiet, and attractive, interesting neighborhoods.
- Health benefits (11.7 percent of responses) and access/proximity to destinations (10.6 percent of responses) are second and third on the list of positive features for walking.
- Weather (9.2 percent), social aspects (8.6 percent), FUTS (7.2 percent) and fresh clean air (6.4 percent) were all mentioned at least 50 times as positive features.

Table 32 **What's good about walking in Flagstaff**

	Number	Percent
Aesthetics	178	21.6
Health benefits	96	11.7
Access/proximity	87	10.6
Weather	76	9.2
Social	71	8.6
FUTS/trails	59	7.2
Fresh/clean air	53	6.4
No car/gas/parking/traffic	29	3.5
Safety	27	3.3
Sidewalks	25	3.0
Diversity/variety	15	1.8

Walkable	12	1.5
Crossings	10	1.2
Environmental benefits	9	1.1
Maintenance	8	1.0
Public transit	6	0.7
Driver behavior	6	0.7
Cost effective	5	0.6
Dog friendly	5	0.6
Jack Welch	3	0.4
Not crowded	3	0.4
Signals/lighting	3	0.4
Parks	3	0.4
Other	34	4.1
Total	823	100.0

Table 32a **What's good about walking in Flagstaff – details for aesthetics**

	Number	Percent
View/scenery	71	39.9
Open/green space	32	18.0

Trees/vegetation	22	12.4
General	18	10.1
Peaceful/quiet	15	8.4
Neighborhoods	13	7.3
Wildlife	7	3.9
Total	178	100.0

What could be done to improve walking in Flagstaff

Survey respondents were also asked to list up to five things that could be done to improve walking in Flagstaff. A total of 269 individuals submitted 588 suggestions for improving walking, which are summarized below in Table 33.

- Improvements to sidewalks were most frequently suggested and represent more than a quarter (27.6 percent) of all responses.
- Improvements to crossings were second-most frequent at 14.1 percent, followed by FUTS at 9.0 percent.
- Subcategories for sidewalk enhancements are included in Table 33a. The most-mentioned sidewalk improvements are to build more sidewalks (34.6 percent of sidewalk suggestions), repair sidewalks (16.7 percent), and remove snow from sidewalks (16.0 percent).
- Subcategories for crossing improvements are detailed in Table 33b. Most crossing suggestions (53.0 percent) call for additional crossings or crosswalks. A total of 21 responses call for use of pedestrian beacons (flashing crossing lights) at more locations in Flagstaff.

Table 33 What could be done to improve walking in Flagstaff

	Number	Percent
Sidewalks	162	27.6
Crossings	83	14.1
FUTS	53	9.0
Overpass/underpass	28	4.8
Lighting	23	3.9
Enforcement	23	3.9
Signing	18	3.1
Lower speed limit	16	2.7
Close streets to vehicles	14	2.4
Maintenance	14	2.4
More parks/open space	13	2.2

Public Transit	13	2.2
Density/mixed use	13	2.2
Bike lanes	12	2.0
Reduce traffic	12	2.0
Education	10	1.7
Dogs	7	1.2
Fix Milton	5	0.9
Safer streets	5	0.9
Buffer	5	0.9
No right turn on red	4	0.7
Intimidation	4	0.7
Drinking fountains	3	0.5
Weather	3	0.5
Other	45	7.7
Total	588	100.0

Table 33a What could be done to improve walking in Flagstaff – details for sidewalks

	Number	Percent
More sidewalks	56	34.6
Repair sidewalks	27	16.7
Snow removal	26	16.0
Connect sidewalks	12	7.4
Wider sidewalks	11	6.8
Clear sidewalks of debris	11	6.8
General	10	6.2
No bikes on sidewalks	3	1.9
No sidewalk cafes	2	1.2
Other	4	2.5
Total	162	100.0

Table 33b What could be done to improve walking in Flagstaff – details for crossings

	Number	Percent
More crossings/crosswalks	44	53.0
Pedestrian beacon	21	25.3
Enforcement	5	6.0
Other	13	15.7
Total	83	100.0

Bicycling results

Locations where it is difficult or uncomfortable to bike

Survey respondents were asked to list up to five locations where it is difficult or uncomfortable to ride a bicycle in Flagstaff, and to indicate what makes it difficult or uncomfortable to bike there. A total of 338 individuals submitted 989 responses to this question, representing 141 unique locations and 1489 reasons why biking is difficult or uncomfortable at those locations.

All locations

For the purposes of further analysis, all of the locations submitted have been categorized by general type and are listed in Table 34. Survey results for each type of location are given in subsequent tables below.

- Almost two-thirds of the locations (65.9 percent) submitted in response to this question are street corridors.
- Intersection locations are a distant second, representing 11.1 percent of locations.

Table 35 includes all the locations listed in response to this question.

- By a wide margin, the most uncomfortable and difficult location for bicyclists is Milton Road, which was cited by a total of 165 times, which represents almost half of respondents (165 out of 338) and 17.5 percent of locations.
- Other significant locations include Butler Avenue (7.6 percent of locations), Route 66 (6.8 percent), downtown Flagstaff (6.6 percent) and Fort Valley Road (5.6 percent).

Table 36 summarizes the factors provided by respondents that make biking difficult or uncomfortable at these locations.

- Just under a third of the factors (29.6 percent) are issues related to bike lanes. These issues include bike lanes that end or are missing (23.1 percent), bike lanes that should be wider (5.9 percent) and other bike lane issues (0.6 percent).
- Concerns about traffic were cited second-most at 17.4 percent. Other significant factors associated with bicycle discomfort include driver behavior (8.6 percent), maintenance (8.2 percent), and issues with FUTS trails (6.2 percent).
- It is noteworthy that 38 respondents indicated a need for grade separations at various locations. Thirteen of these responses cited the railroad underpass at Florence-Walnut, and another 12 indicated a need for an underpass beneath Route 66 and the BNSF tracks between downtown and the Southside.

- It is also noteworthy that 35 responses cited problems with a lack of protection or separation for bicyclists from traffic.

Table 34 Least comfortable/most difficult places to bike, by type

	Number	Percent
Streets	652	65.9
Intersection	110	11.1
Neighborhood	84	8.5
FUTS	51	5.2
Citywide	44	4.4
Spot	28	2.8
Connections	15	1.5
Outside	2	0.2
Park	2	0.2
Forest Service	1	0.1
Total	989	100.0

Table 35 Least comfortable/most difficult places to bike, all locations

	Number	Percent
Milton Rd	165	17.5
Butler Ave	72	7.6
Route 66	64	6.8
Downtown	62	6.6
Fort Valley Rd/180	53	5.6
San Francisco St	34	3.6
Beaver St	28	3.0
Fourth St	27	2.9
Beulah Blvd	26	2.8
Lone Tree Rd	23	2.4
Route 66/Santa Fe/Sitgreaves	20	2.1
Route 66 Trail	18	1.9
Highway 89	15	1.6
Fort Valley Rd	13	1.4
Woodlands Village Blvd	13	1.4
NAU	12	1.3
Florence-Walnut	11	1.2
Cedar/Forest	11	1.2
Lake Mary Rd	10	1.1
Lockett Rd	10	1.1

Table 36 Factors that make biking difficult or uncomfortable

	Number	Percent
Bike lane missing/ends	346	23.1
Traffic	259	17.3
Behavior - driver	128	8.6
Maintenance	123	8.2
Bike lane - wider	89	5.9
FUTS - missing/ends	56	3.7
Turning vehicles	55	3.7
Crossings	45	3.0
Narrow road	40	2.7
Safety	40	2.7
No grade separation	38	2.5
Other FUTS	37	2.5
Not protected/separated	35	2.3
Traffic control	28	1.9
Not bike friendly	23	1.5
Parked cars	20	1.3
Visibility	17	1.1
Turning left	16	1.1
Signing	14	0.9
Wind-hills	13	0.9
Conflicts with pedestrians	10	0.7
Other bike lane	9	0.6
Out of direction	9	0.6
Intimidation	7	0.5
Lighting	6	0.4
Bike parking	6	0.4
Behavior - bicyclist	5	0.3
No sharrows	3	0.2
Law enforcement	2	0.1
Dogs	2	0.1
Other	15	1.0
Total	1496	100

Other	258	27.3
Total	945	100.0

Tables 36a through 36f below divide several of the most-often cited factors into subcategories. Additional details are provided in these tables for bike lanes, traffic, maintenance, FUTS trails, traffic control, and crossings.

- The absence of bike lanes are the single biggest issue for bike lanes, and represent 69.1 percent of all the bike lane issue cited. The desire for wider bike lanes, which was mentioned 89 times, is also notable.
- Traffic concerns for bicyclists are typically related to the volume or speed of traffic.
- Within the category of maintenance issues, the condition of streets was the most frequent problem, comprising 68.3 percent of all maintenance issues. Snow and debris in bike lanes is also a significant problem was cited 36 times (29.3 percent of maintenance issues).
- The absence of FUTS trails and trails that end are most common FUTS-related issue. A total of 56 respondents cited this as an issue for biking, representing 60.2 percent of FUTS issues.
- Traffic signals that do not detect bicycles is the primary issue associated with traffic control, and was mentioned in 22 responses.
- For crossings, most respondents (57.8 percent) described general difficulty with crossing streets and intersections on bike. Twelve respondents indicated an issue with intersections that prohibit crossings on one leg. In these situations, bicyclists are positioned on the wrong side of the street (facing traffic) on the far side of the crossing, and must cross another leg of the intersection to get on the correct side. Ten of these 12 responses refer to intersections along Route 66, and the other two are on Milton Road. Of the locations on Route 66, the Route 66 and Arrowhead intersection is mentioned 5 times.

Table 36a Factors that make biking difficult or uncomfortable – details for bike lanes

	Number	Percent
Bike lane - none	307	69.1
Bike lane - wider	89	20.0
Bike lane - ends	39	8.8
Bike lane - signing/markings	9	2.0
Total	444	100.0

Table 36b Factors that make biking difficult or uncomfortable – details for traffic

	Number	Percent
Traffic - volume	115	44.4
Traffic - speed	90	34.7
Traffic - general	50	19.3
Traffic - exhaust	4	1.5
Total	259	100.0

Table 36c Factors that make biking difficult or uncomfortable – details for maintenance

	Number	Percent
Maintenance - condition	84	68.3
Maintenance - snow/debris	36	29.3
Maintenance - obstructions	3	2.4
Total	123	100.0

Table 36e Factors that make biking difficult or uncomfortable – details for traffic control

	Number	Percent
Traffic control - signal detection	22	78.6
Traffic control - stop signs	3	10.7
Traffic control - other	3	10.7
Total	28	100.0

Table 36d Factors that make biking difficult or uncomfortable – details for FUTS trails

	Number	Percent
FUTS - missing/ends	56	60.2
FUTS - misc problems	11	11.8
FUTS - maintenance	9	9.7
FUTS - not paved	9	9.7
FUTS - transitions	8	8.6
Total	93	100.0

Table 36f Factors that make biking difficult or uncomfortable – details for crossings

	Number	Percent
Crossing - difficult	26	57.8
Crossing - one side	12	26.7
Crossing - none	7	15.6
Total	45	100.0

Streets

Streets that are least comfortable and most difficult for bicycling are listed in Table 37. The factors that make these streets difficult or uncomfortable are summarized in Table 38.

- Of the 45 different streets that were cited in responses to this question, Milton Road was mentioned most frequently by far. A total of 165 responses complained of unfavorable conditions for bicyclists on Milton Road, representing more than a quarter (25.3 percent) of the responses for streets.
- Butler Avenue (11.0 percent of responses for streets), Route 66 (9.8 percent), and Fort Valley Road (8.1 percent) were all mentioned more than 50 times.
- Issues with bike lanes is the most common problem with street corridors, and was referenced in 37.3 percent of the reasons given for streets.
- Other significant issues include traffic (19.6 percent) and maintenance concerns (10.5 percent).

Table 37 Least comfortable/most difficult streets for biking

	Number	Percent
Milton Rd	165	25.3
Butler Ave	72	11.0
Route 66	64	9.8
Fort Valley Rd/180	53	8.1
San Francisco St	33	5.1
Beaver St	28	4.3

Fourth St	27	4.1
Beulah Blvd	26	4.0
Lone Tree Rd	23	3.5
Highway 89	15	2.3
Fort Valley Rd	13	2.0
Woodlands Village Blvd	13	2.0
Cedar/Forest	11	1.7
Lake Mary Rd	10	1.5
Lockett Rd	10	1.5
Pine Knoll Dr	8	1.2
McConnell Dr	7	1.1
Humphreys St	7	1.1
Bonito St	6	0.9
SR 89A	6	0.9
Snowbowl Rd	6	0.9
Columbus Dr	5	0.8
Solier Ave	5	0.8
Other streets	39	6.0
Total	652	100.0

Table 38 Factors for streets that make biking difficult or uncomfortable

	Number	Percent
Bike lane issues	386	37.3
Traffic	203	19.6
Maintenance	109	10.5
Driver behavior	79	7.6
FUTS	47	4.5
Turning vehicles	37	3.6
Not protected/separated	29	2.8
Safety	26	2.5
Narrow road	25	2.4
Parked cars	12	1.2
Not bike friendly	11	1.1
Wind-hills	10	1.0
Visibility	9	0.9
Crossings	9	0.9
Signing	9	0.9
No grade separation	8	0.8
Turning left	5	0.5
Other	22	2.1
Total	1036	100.0

Tables 38a through 38c list factors for the three least comfortable or most difficult streets for biking – Milton Road, Butler Avenue, and Route 66.

- Bike lane issues are the most significant factors for both Milton Road and Route 66. Specific issues with bike lanes are typically the absence of bike lanes, bike lanes that end, and bike lanes that are not wide enough. Milton Road does not have bike lanes or a shoulder from Route 66 south to its terminus. Route 66 has a striped shoulder, however it is not designated as a bike lane, it is narrower than a typical bike lane, and numerous segments along West Route 66 are missing.
- For Butler Avenue, traffic is the most significant issue and bike lanes are a close second. Although Butler Avenue has bike lanes for most of its length, they are not sufficient to make cyclists feel comfortable given the speed and volume of traffic on Butler. Missing bike lanes are an issue in the segment of Butler Avenue between Ponderosa Parkway and Fourth Street.

Table 38a Factors for streets that make biking difficult or uncomfortable – Milton Road

	Number	Percent
Bike lane	100	37.9
Traffic	67	25.4

Safety	18	6.8
Driver behavior	16	6.1
Not protected/separated	12	4.5
Turning vehicles	12	4.5
FUTS	10	3.8
Maintenance	7	2.7
Not bike friendly	5	1.9
No grade separation	5	1.9
Other	12	4.5
Total	264	100.0

Table 38c Factors for streets that make biking difficult or uncomfortable – Route 66

	Number	Percent
Bike lane	34	35.1
Traffic	18	18.6
Maintenance	14	14.4
Driver behavior	13	13.4
Other	18	18.6
Total	97	100.0

Intersections

Table 39 Least comfortable/most difficult intersections for biking

	Number	Percent
Route 66/Santa Fe/Sitgreaves	20	18.2
Route 66/Arrowhead	7	6.4
Butler X	6	5.5
Fort Valley/Forest	6	5.5
Milton/Butler	6	5.5
Lake Mary/Beulah	5	4.5
Other intersections	60	54.5
Total	110	100.0

Table 38b Factors for streets that make biking difficult or uncomfortable – Butler Avenue

	Number	Percent
Traffic	34	30.1
Bike lane	29	25.7
Turning vehicles	8	7.1
Maintenance	8	7.1
Not protected/separated	7	6.2
Driver behavior	7	6.2
FUTS	6	5.3
Other	14	12.4
Total	113	100.0

Table 40 Factors for intersections that make biking difficult or uncomfortable

	Number	Percent
Bike lane	28	17.2
Crossings	28	17.2
Traffic	25	15.3
Driver behavior	19	11.7
Traffic control	14	8.6
Turning left	10	6.1
Safety	8	4.9
Turning vehicles	6	3.7
Visibility	6	3.7
Other	19	11.7
Total	163	100.0

The least comfortable/most difficult intersections for bicyclists are listed in Table 39. Table 40 includes a summary of the factors that make intersections difficult and uncomfortable for bicycling.

- The multi-leg intersection at Route 66, Sitgreaves Street, and Santa Fe Avenue was mentioned in 20 responses. This is where Route 66 make a sweeping curve near the BNSF bridge.
- Bike lane issues (17.2 percent of all reasons given for intersections), crossing difficulty (17.2 percent), and traffic (15.3 percent) were all cited as issues for bicyclists at intersections.

Neighborhoods

Table 41 lists the least comfortable or most difficult neighborhoods for cycling, and Table 42 summarizes the factors that make bicycling in these neighborhoods difficult or uncomfortable.

- Respondents identified downtown Flagstaff as the most problematic neighborhood for bicyclists, with 58 mentions. This represents 69.0 percent of all of the neighborhoods listed.
- Bike lane issues (17.1 percent of factors given for neighborhoods), traffic (15.4 percent), and driver behavior (13.7 percent) are the most common issues for bicyclists in neighborhoods.

Table 41 Least comfortable/most difficult neighborhoods for biking

	Number	Percent
Downtown	58	69.0
NAU	12	14.3
Sunnyside	4	4.8
Other neighborhoods	10	11.9
Total	84	100.0

Table 42 Factors for neighborhoods that make biking difficult or uncomfortable

	Number	Percent
Bike lane	20	17.1
Traffic	18	15.4
Driver behavior	16	13.7
Parked cars	8	6.8
Narrow road	8	6.8
FUTS	6	5.1
Bike parking	6	5.1
No grade separation	6	5.1
Traffic control	5	4.3
Other	24	20.5
Total	117	100.0

FUTS trails

The least comfortable/most difficult FUTS trails for bicyclists are listed in Table 43. Table 44 includes a summary of the factors that make FUTS trails difficult or uncomfortable.

- The Route 66 Trail was most frequently cited FUTS trail as difficult or uncomfortable, and was included in 18 responses representing more than a third (35.3 percent) of the responses for FUTS trails.
- No single factor stands out as most problematic for FUTS trails, although maintenance, turning vehicles, difficult crossings, and FUTS that end or are missing were all referenced as issues.

Table 43 Least comfortable/most difficult FUTS trails for biking

	Number	Percent
Route 66 Trail	18	35.3
Sinclair Wash Trail	7	13.7
FUTS in general	6	11.8
Other FUTS trails	20	39.2
Total	51	100.0

Table 44 Factors for FUTS trails that make biking difficult or uncomfortable

	Number	Percent
FUTS maintenance	9	13.8
FUTS - other problems	9	13.8
Turning vehicles	8	12.3
Crossings	8	12.3
FUTS - missing/ends	6	9.2
Other	25	38.5
Total	65	100.0

Specific issues and locations

Tables 41 through 45 below isolate specific factors – missing bike lanes, maintenance, driver behavior, traffic, and turning vehicles – that were frequently cited as problems for bicycling, and lists the locations where they are cited most often.

- Milton Road is at the top of several of these lists, including missing bike lanes, driver behavior, traffic, and turning vehicles.
- Maintenance is an issue on Fort Valley Road and Route 66. It should be noted that since the survey was taken, ADOT has completed a pavement resurfacing project on Fort Valley Road that has fixed many of the problems.

Table 45 Locations where no bike lane or bike lane ends is an issue

	Number	Percent
Milton Rd	85	24.8
Route 66	24	7.0
Butler Ave	21	6.1
Beulah Blvd	19	5.5
San Francisco St	19	5.5
Beaver St	18	5.2
Lone Tree Rd	17	5.0
Downtown	15	4.4
Fort Valley Rd/180	14	4.1
Woodlands Village Blvd	11	3.2
Route 66/Santa Fe/Sitgreaves	10	2.9
Highway 89	9	2.6
Fort Valley Rd	8	2.3
Humphreys St	7	2.0
Pine Knoll Dr	7	2.0

Columbus Dr	5	1.5
SR 89A	5	1.5
McConnell Dr	5	1.5
Other locations	44	12.8
Total	343	100.0

Table 47 Locations where driver behavior is an issue

	Number	Percent
Milton Rd	16	13.4
San Francisco St	14	11.8
Route 66	13	10.9
Downtown	11	9.2
Beaver St	8	6.7
Butler Ave	7	5.9
Fort Valley Rd/180	5	4.2
Other locations	45	37.8
Total	119	100.0

Table 49 Locations where turning vehicles is an issue

	Number	Percent
Milton Rd	12	23.1
Butler Ave	8	15.4
Route 66 Trail	4	7.7
Beulah Blvd	4	7.7
Fort Valley Trail	4	7.7
Fourth St	4	7.7
Other locations	16	30.8
Total	52	100.0

Table 46 Locations where maintenance is an issue

	Number	Percent
Fort Valley Rd/180	19	15.3
Route 66	14	11.3
Butler Ave	8	6.5
Beaver St	8	6.5
Lockett Rd	7	5.6
Milton Rd	7	5.6
Route 66 Trail	5	4.0
Solier Ave	5	4.0
San Francisco St	5	4.0
Other locations	46	37.1
Total	124	100.0

Table 48 Locations where traffic is an issue

	Number	Percent
Milton Rd	67	26.7
Butler Ave	34	13.5
Route 66	18	7.2
Downtown	17	6.8
Fourth St	14	5.6
Fort Valley Rd/180	12	4.8
San Francisco St	8	3.2
Beulah Blvd	8	3.2
Woodlands Village Blvd	7	2.8
Route 66/Santa Fe/Sitgreaves	5	2.0
Other locations	61	24.3
Total	251	100.0

Locations where it is good to bike

Survey respondents were asked to list up to five locations where it is good to bicycle in Flagstaff, and to indicate what makes it good to bike there. A total of 292 individuals submitted 650 responses to this question, representing 64 unique locations and 777 reasons why biking is enjoyable at these locations.

All locations

For the purposes of further analysis, locations submitted were categorized by general type and are listed in Table 50. Survey results for each type of location are given in subsequent tables.

- FUTS trails were cited 264 times as good places to ride, which comprises 40.6 percent all responses to this question.
- Streets (177 responses, 27.2 percent of all responses) and neighborhoods (133 responses, 20.5 percent of all responses) were also frequently mentioned as good places for bicycling.

Table 52 summarizes all of the individual locations listed by respondents as good places to bicycle.

- The Route 66 FUTS trail is respondents' choice for the top location in Flagstaff for bicycling. A total of 95 respondents out of 292 (32.5 percent of respondents) listed this trail; this represents 15.6 percent of all locations listed.
- Another 92 respondents (31.5 percent of respondents, 15.1 percent of locations) listed FUTS trail in general as a good place for biking. In these cases the respondent did not name a specific trail.
- Other significant locations that are highlighted as good places for biking include the NAU campus (8.9 percent of locations), downtown Flagstaff (8.1 percent), Lake Mary Road (6.6 percent), Beaver Street (5.8 percent), and San Francisco Street (4.4 percent). All of these locations were listed by more than 25 respondents.

Table 50 Good places to bike, by type of location

	Number	Percent
FUTS	264	40.6
Streets	177	27.2
Neighborhood	133	20.5
Citywide	32	4.9
Park	17	2.6
Forest Service	12	1.8
Outside	10	1.5
Intersection	4	0.6
Other	1	0.2
Total	650	100.0

Table 51 Factors that make it good to bike

	Number	Percent
Bike lanes	166	21.4
No vehicles	113	14.5
Little/slow traffic	93	12.0
FUTS	80	10.3
Access/connectivity	64	8.2
Shared lane markings	49	6.3
Wide paths	39	5.0
Aesthetics	33	4.2
Maintenance	23	3.0
Safety	22	2.8
Surface	17	2.2
Enjoyable	14	1.8
Driver behavior	14	1.8
Bike friendly	13	1.7
Green bike lanes	8	1.0
Community of cyclists	7	0.9
Bike parking	6	0.8
Visibility	4	0.5
Signing	3	0.4

Table 52 **Good places to bike, all locations**

	Number	Percent
Route 66 Trail	95	15.6
FUTS in general	92	15.1
NAU	54	8.9
Downtown	49	8.1
Lake Mary Rd	40	6.6
Beaver St	35	5.8
San Francisco St	27	4.4
Karen Cooper Trail	16	2.6
Buffalo Park	15	2.5
Fort Valley Rd	14	2.3
Cedar Trail	12	2.0
Forest Service	12	2.0
Fort Valley Trail	12	2.0
Cedar/Forest	11	1.8
Butler Ave	10	1.6
Other	114	18.8
Total	650	100.0

MTB trails	2	0.3
Grades	1	0.1
Other	6	0.8
Total	777	100.0

Table 51 includes the factors that make these locations good for bicycling.

- The presence of bike lanes was given as the most important factor for places that are good to bike. Bike lanes were mentioned a total of 166 times, representing 21.4 percent of all the reasons given.
- The absence of vehicles was cited second-most frequently, with 113 responses (14.5 percent of all factors). This factor applies almost exclusively to FUTS trails.
- Other significant factors include places with little or slow traffic (12.0 percent), the presence of FUTS trails (10.3 percent), and good access and connectivity (8.2 percent). All of these reasons were mentioned in excess of 60 times.
- Shared lane markings, which were mentioned 49 times in response to this question, are notable in the list of factors. Shared lane marking have been installed relatively recently on several primary bike routes in downtown Flagstaff and in the Southside neighborhood.

FUTS trails

The highest-rated FUTS trails for bicyclists are listed in Table 53, and Table 54 includes a summary of the factors that make FUTS trails good for bicycling.

- The Route 66 Trail was mentioned 95 times, the most of any single FUTS trail by a wide margin. The second-most frequently mentioned trail is the Karen Cooper Trail, with 16 responses.
- The Route 66 Trail was also mentioned more than any other FUTS trail in Table 39 above, which lists FUTS trails that are most difficult or least comfortable for bicyclists. The fact that the trail appears at the top of both lists – FUTS trails that are good for biking and FUTS trails that are most difficult/least uncomfortable for biking – is likely evidence of how much this trail is used by bicyclists and how important it is for bicycle travel.
- FUTS trails in general were cited 90 times (34.1 percent), second most on the list. In these cases the respondents referred to the entire system, rather than individual trails
- The most appealing aspect of FUTS trails for bicyclists is that they are isolated from traffic. More than a third (34.0 percent) of all the reasons for FUTS trails cited no vehicles as the reason why it is good for bicycling.
- Good access and connectivity are also important and were included in 15.8 percent of responses to this question. The third-most frequent reason given is that FUTS paths are wide enough to be shared by bicyclists and pedestrians.

Table 53 Good FUTS trails for biking

	Number	Percent
Route 66 Trail	95	36.0
FUTS in general	90	34.1
Karen Cooper Trail	16	6.1
Fort Valley Trail	12	4.5
Cedar Trail	12	4.5
Buffalo Park	8	3.0
Sinclair Wash Trail	7	2.7
Arizona Trail	6	2.3
Lone Tree Trail	5	1.9
Other FUTS trails	13	4.9
Total	264	100.0

Table 54 Factors for FUTS trails that make it good to bike

	Number	Percent
No vehicles	112	34.0
Access/connectivity	52	15.8
Wide paths	39	11.9
FUTS	35	10.6
Aesthetics	25	7.6
Safety	19	5.8
Surface	17	5.2
Maintenance	16	4.9
Enjoyable	10	3.0
Other	4	1.2
Total	329	100.0

Streets

Table 55 includes respondents' list of streets that are good for bicycling. Table 56 lists the factors that make these streets bicycle-friendly.

- Lake Mary Road was mentioned the more times (40, 22.6 percent of street locations)) than any other street, followed closely by Beaver Street with 35 responses (19.8 percent) and San Francisco Street with 27 (15.3 percent).

- The presence of bike lanes was a positive factor in more than half of responses (119 times or 54.6 percent) for streets.
- Shared lane markings were a distant second, with 24 citations (11.0 percent).
- It is worthwhile noting that Lake Mary Road was widened several years ago to make space for a bike lane/shoulder along the section from J.W. Powell Boulevard to City limits, and that shared lane markings were added to both Beaver Street and San Francisco Street. These survey results indicate that bicyclists are responding to the improvements that were made.
- Green bike lanes, which were recently added at four intersections along South Butler Avenue, were mentioned in seven surveys.
- Table 57 lists streets where respondents cited the presence of a bike lane as a factor in making the street good for biking. Lake Mary Road tops this list with 35 responses.

Table 55 **Good streets for biking**

	Number	Percent
Lake Mary Rd	40	22.6
Beaver St	35	19.8
San Francisco St	27	15.3
Fort Valley Rd	14	7.9
Cedar/Forest	11	6.2
Butler Ave	10	5.6
Route 66	9	5.1
Lone Tree Rd	8	4.5
Other streets	23	13.0
Total	177	100.0

Table 56 **Factors for streets that make it good to bike**

	Number	Percent
Bike lanes	119	54.6
Shared lane markings	24	11.0
Little/slow traffic	21	9.6
FUTS	13	6.0
Green bike lanes	7	3.2
Maintenance	6	2.8
Driver behavior	5	2.3
Aesthetics	5	2.3
Other	18	8.3
Total	218	100.0

Table 57 **Streets where bike lanes are a positive feature**

	Number	Percent
Lake Mary Rd	35	29.4
Beaver St	17	14.3
Cedar/Forest	11	9.2
Fort Valley Rd	11	9.2
San Francisco St	9	7.6
Butler Ave	8	6.7
Lone Tree Rd	7	5.9
Route 66	5	4.2
Other streets	16	13.4

Total	119	100.0
-------	-----	-------

Neighborhoods

Table 58 lists neighborhoods that are good for biking, and Table 59 summarizes the factors that contribute to good biking in neighborhoods.

- Respondents find two neighborhoods – the NAU campus and downtown Flagstaff – to be bike-friendly. NAU was referenced 54 times (40.6 percent of neighborhoods) and downtown was included in 49 responses (36.8 percent of neighborhoods).
- A total of 15 neighborhoods were cited in response to this question, but no other neighborhood was cited more than six times.
- A total of 59 respondents listed little or slow traffic on neighborhood streets as positive for biking. This represents a third (33.1 percent) of all the reasons given for neighborhoods.
- The presence of other facilities for bicyclists, including bike lanes, shared lane markings, and FUTS trails are also important. Each of these facilities was referenced as a positive feature at least 25 times.

Table 58 **Good neighborhoods for biking**

	Number	Percent
NAU	54	40.6
Downtown	49	36.8
Coconino Estates	6	4.5
Other neighborhoods	24	18.0
Total	133	100.0

Table 59 **Factors for neighborhoods that make it good to bike**

	Number	Percent
Little/slow traffic	59	33.1
Bike lanes	36	20.2
Shared lane markings	25	14.0
FUTS	25	14.0
Driver behavior	8	4.5
Access/connectivity	8	4.5
Bike parking	6	3.4
Other	11	6.2
Total	178	100.0

Tables 59a and 59b call out the reasons given for why there is a positive biking environment on the NAU campus and in downtown Flagstaff.

- On the NAU campus, respondents like the presence of bike lanes (35.0 percent of factors for the NAU campus), little or slow traffic on campus streets (27.5 percent), and FUTS trails (22.5 percent).

- For downtown, the most-often mentioned feature is shared lane markings (40.4 percent), which are present on Beaver Street, San Francisco Street, Aspen Avenue, and Birch Avenue in downtown. Little or slow traffic on streets was also cited, but less frequently (24.6 percent).

Table 59a Factors for neighborhoods that make it good to bike – NAU campus

	Number	Percent
Bike lanes	28	35.0
Little/slow traffic	22	27.5
FUTS	18	22.5
Other	12	15.0
Total	80	100.0

Table 59b Factors for neighborhoods that make it good to bike – Downtown

	Number	Percent
Shared lane markings	23	40.4
Little/slow traffic	14	24.6
Bike parking	5	8.8
Bike lanes	5	8.8
Other	10	17.5
Total	57	100.0

What's good about biking in Flagstaff

Survey respondents were asked to list up to five things they like about bicycling in Flagstaff. A total of 269 individuals listed 744 positive features, which are summarized below in Table 60.

Table 60 What's good about biking in Flagstaff

	Number	Percent
FUTS	98	13.2
Health benefits	74	9.9
Aesthetics	63	8.5
Community of cyclists	52	7.0
Access/connectivity	50	6.7
Faster than driving	45	6.0
Weather	40	5.4
Bike lanes	40	5.4
Fresh/clean air	27	3.6
Driver behavior	26	3.5
Environmental benefits	24	3.2
Short distances	24	3.2
Bike friendly community	23	3.1

Avoid parking	18	2.4
Economic benefits	16	2.2
MTB trails	15	2.0
Alternate routes	14	1.9
Hills/altitude	10	1.3
Safety	9	1.2
Shared lane markings	8	1.1
Bike parking	8	1.1
Racks on buses	8	1.1
Little/slow traffic	7	0.9
Infrastructure	7	0.9
Bike shops	4	0.5
Bike to Work Week	4	0.5
NAU	3	0.4
Other	27	3.6
Total	744	100.0

- FUTS trails are cited most-often as a positive features for biking in Flagstaff, comprising 36.4 percent of respondents (98 out of 269) and 13.2 percent of all responses to this question.
- Health benefits were second on the list at 9.9 percent of all responses. Health benefits are also second on the list of what's good about walking in Flagstaff (Table 29).

- Other items that were mentioned at least 50 times include aesthetic considerations (63 mentions, 8.5 percent), the community of cyclists in Flagstaff (52 mentions, 7.0 percent), and access/connectivity to destinations (50 mentions, 6.7 percent).

What could be done to improve biking in Flagstaff

Survey respondents were also asked to list up to five things that could be done to improve bicycling in Flagstaff. A total of 260 individuals submitted 627 suggestions for improvement, which are summarized in Table 61.

- Improvements to bike lanes were recommended most often in the survey, representing 134 out of 627 total suggestions (21.4 percent). A more detailed list of suggestions for bike lanes is included in Table 61a below.
- Suggestions to improve FUTS trails garnered 71 mentions, or 11.3 percent of all responses to this question.
- Additional maintenance were suggested 65 times (10.4 percent) and increased efforts to educate drivers and bicyclists were suggested 63 times (10.0 percent) in the survey.

Table 61 What could be done to improve biking in Flagstaff

	Number	Percent
Bike lanes	134	21.4
FUTS	71	11.3
Maintenance	65	10.4
Education	63	10.0
Infrastructure	48	7.7
Signing	35	5.6
Enforcement	33	5.3
Encouragement	29	4.6
Supportive laws	19	3.0
Bike parking	16	2.6

Slower speeds	14	2.2
Bike routes	14	2.2
Signal detection	14	2.2
Safety	12	1.9
Gov't support	9	1.4
Wind	6	1.0
Crossings	6	1.0
Law enforcement support	5	0.8
Density/mixed use	4	0.6
Grade separations	4	0.6
Other suggestions	26	4.1
Total	627	100.0

More detailed subcategories are provided for a number of these items in Tables 61a through 61h below. Details are listed for bike lanes (Table 61a), FUTS trails (Table 61b), maintenance (Tables 61c and 61d), education (Table 61e), infrastructure (Table 61f), enforcement (Table 61g), and supportive laws (Table 61h).

- More than half (54.4 percent) of the suggestions for bike lanes request more bike lanes. Other comments cited wider bikes lanes (12.7 percent), protected bike lanes (11.2 percent), and extension of bike lanes that end (11.2 percent).

- More than two-thirds (67.1 percent) of suggestions for FUTS trails are to build more FUTS trails. Another 17.1 percent called for completion of trails that end.
- Maintenance concerns include removal of cinders and other debris (35.4 percent of maintenance suggestions), improving pavement condition (29.2 percent), and snow removal (18.5 percent).
- Table 61d indicates general location where respondents cited a need for better maintenance. About two-thirds (62.9 percent) cite a need for better maintenance of bike lanes. Streets were cited in 25.8 percent of maintenance suggestions, and FUTS trails in 11.3 percent.
- Suggestions for infrastructure improvements are detailed in Table 61f, and typically include facilities that go beyond typical bike lanes. Non-specific requests for better infrastructure make up 8 of the 48 infrastructure recommendations, followed by shared lane markings with 7 responses. Other recommended facilities include better lighting, green bike lanes, and bike signals.
- Of the 63 suggestions for increased education, 26 say education should be directed at drivers (41.3 percent), 16 call for more education for bicyclists (25.4 percent), and 12 indicate more education for both drivers and bicyclists (19.0 percent).
- A total of 33 responses recommended additional enforcement of traffic laws. Of these, 16 comments suggested additional enforcement directed towards cyclists, 8 recommended increased enforcement for drivers, and 9 recommended enforcement for both drivers and cyclists.
- Of the 19 recommendations for bicycle-supportive laws, 8 called for a ban on cell phone usage while driving. Other suggestions for legislation include allowing cyclists to treat stop signs like yield signs, penalties for road rage, more severe penalties for hitting a cyclist, and prohibition on right turns on red.

Table 61a What could be done to improve biking in Flagstaff – details for bike lanes

	Number	Percent
More	73	54.5
Wider	17	12.7
Protected	15	11.2
End	15	11.2
Better	7	5.2
Blocked	3	2.2
Other	4	3.0
Total	134	100.0

Table 61b What could be done to improve biking in Flagstaff – details for FUTS trails

	Number	Percent
More	48	67.1
End	12	17.1
Pave	6	8.6
Better	3	4.3
Wider	2	2.9
Total	71	100.0

Table 61c What could be done to improve biking in Flagstaff – details for maintenance

	Number	Percent
Debris	23	35.4
Pavement	19	29.2
Snow	12	18.5
Markings	7	10.8
General	4	6.2
Total	65	100.0

Table 61e What could be done to improve biking in Flagstaff – details for education

	Number	Percent
Driver	26	41.3
Bicyclist	16	25.4
Both	12	19.0
General	9	14.3
Total	63	100.0

Table 61g What could be done to improve biking in Flagstaff – details for enforcement

	Number	Percent
Bicyclist	16	48.5
Both	9	27.3
Driver	8	24.2
Total	33	100.0

Table 61d What could be done to improve biking in Flagstaff – locations for maintenance

	Number	Percent
Bike lanes	39	62.9
Streets	16	25.8
FUTS	7	11.3
Total	62	100.0

Table 61f What could be done to improve biking in Flagstaff – details for infrastructure

	Number	Percent
General	8	16.7
Shared lane markings	7	14.6
Lighting	6	12.5
Close streets	4	8.3
Green bike lanes	4	8.3
Bike park	4	8.3
Grades	3	6.3
Bike signals	2	4.2
Other	10	20.8
Total	48	100.0

Table 61h What could be done to improve biking in Flagstaff – details for supportive laws

	Number	Percent
Cellphone ban	8	42.1
Yield at stop	4	21.1
Road rage	2	10.5
General	2	10.5
Penalties	2	10.5
Right on red	1	5.3
Total	19	100.0

FLAGSTAFF

SERVICE AT A HIGHER ELEVATION

[CITY HALL](#)

[RESIDENTS](#)

[BUSINESSES](#)

[VISITORS](#)

[SERVICES](#)



[E- Services](#)

[Be Resourceful](#)

CITY COUNCIL

E- SERVICES

EMERGENCY SERVICES

BE RESOURCEFUL

NOTIFY ME

REPORT A CONCERN

Flagstaff: [Home](#) | [Forms](#)

Walking and biking survey

The City of Flagstaff, in partnership with North Country Health Care's Hermosa Vida project, is conducting a short survey walking and biking, to help us identify places in Flagstaff where it's good to walk or bike, and places where walking and need improvement. Information from the survey will be used to develop pedestrian and bicycle master plans, and to inform future projects to improve walking and biking in Flagstaff

The survey is divided into two sections, the first includes a number of questions about WALKING in Flagstaff, and the second about BICYCLING. You may complete both sections, or just one or the other.

The survey should take 10-15 minutes to complete. It will be available through June 29, 2014. Please take the survey only.

..

The first three questions are optional, but your responses will help us determine if the survey includes a representative of Flagstaff's population.

1 What is your age?

2 What is your gender?

☐ Female

☐ Male

3 Please specify your ethnicity:

☐ White

☐ Native American or American Indian

☐ Hispanic or Latino

☐ Asian / Pacific Islander

☐ Black or African American

☐ Other

Walking

4 About how many days per month do you walk for recreation, exercise, or transportation to work, school, shopping, or errands?

☐ Almost every day (more than 25 days per month)

☐ Occasionally (1 to 5 days per month)

☐ Most days (15 to 25 days per month)

☐ Almost never (0 to 1 days per month)

☐ Frequently (5 to 15 days per month)

5

Are there places in Flagstaff where you find it difficult or uncomfortable to walk? List up to 5 locations in the spaces provided below, and tell us what makes it difficult or uncomfortable to walk at this location. Indicate specific locations, for example intersection of Tenth and Elm, or Oak Street between Second and Third. You don't have to fill in all of the spaces.

5a Location

5a What makes it difficult or uncomfortable to walk there?

5b Location

5b What makes it difficult or uncomfortable to walk there?

5c Location

5c What makes it difficult or uncomfortable to walk there?

5d Location

5d What makes it difficult or uncomfortable to walk there?

5e Location

5e What makes it difficult or uncomfortable to walk there?

6

Where is it good to walk in Flagstaff? List up to 5 specific locations in the spaces provided below, and tell us what makes it good to walk at this location. Please include only places within City limits, not trails or other locations in the National Forest or outside Flagstaff.

6a Location

6a What makes it good to walk there?

6b Location	6b What makes it good to walk there?
6c Location	6c What makes it good to walk there?
6d Location	6d What makes it good to walk there?
6e Location	6e What makes it good to walk there?
7 What do you like about walking in Flagstaff? List up to 5 items in the spaces provided below (you don't have to fill in all of the spaces).	
7a	
7b	
7c	
7d	
7e	
8 What could be done to improve walking in Flagstaff? List up to 5 items in the spaces provided below (you don't have to fill in all of the spaces).	
8a	
8b	
8c	
8d	
8e	
Bicycling	
9 About how many days per month do you bike for recreation, exercise, or for transportation to work, school, shopping, or errands?	<input type="radio"/> Almost every day (more than 25 days per month) <input type="radio"/> Most days (15 to 25 days per month) <input type="radio"/> Frequently (5 to 15 days per month) <input type="radio"/> Occasionally (1 to 5 days per month) <input type="radio"/> Almost never (0 to 1 days per month)
10 Are there locations in Flagstaff where you find it difficult or uncomfortable to bicycle? List up to 5 specific locations in the spaces provided below, and tell us what makes it difficult or uncomfortable to bike at this location. You don't have to fill in all of the spaces.	
10a Location	10a What makes it difficult or uncomfortable to bike there?
10b Location	10b What makes it difficult or uncomfortable to bike there?
10c Location	10c What makes it difficult or uncomfortable to bike there?
10d Location	10d What makes it difficult or uncomfortable to bike there?
10e Location	10e What makes it difficult or uncomfortable to bike there?

11

Where is it good to bicycle in Flagstaff? List up to 5 specific locations in the spaces provided below, and tell us what makes it good to bike at this location. Please include only places within City limits, not trails or other locations in the National Forest or outside Flagstaff.

11a Location

11a What makes it good to bike there?

11b Location

11b What makes it good to bike there?

11c Location

11c What makes it good to bike there?

11d Location

11d What makes it good to bike there?

11e Location

11e What makes it good to bike there?

12

What do you like about bicycling in Flagstaff? List up to 5 items in the spaces provided below (you don't have to fill in all the spaces).

12a

12b

12c

12d

12e

13

What could be done to improve bicycling in Flagstaff? List up to 5 items in the spaces provided below (you don't have to fill in all of the spaces).

13a

13b

13c

13d

13e

Thank you for participating! If you have any questions or comments, please do not hesitate to contact us at mince@flagstaffaz.gov

..

Submit

Reset

Cancel



[Home](#) | [Calendar](#) | [Contact Us](#) | [Employee Portal](#) | [Stormwater](#) | [Accessibility](#) | [Copyright Notices](#) | Powered by CivicPlus

Flagstaff City Hall: 211 West Aspen Ave, Flagstaff, AZ 86001, Ph: (928) 213-2000, Email: ask@flagstaffaz.gov